



Derby Hospitals
NHS Foundation Trust



Advanced Practitioner: Histopathology Dissection

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- Specimen dissection is the single most important stage in histopathology
- How well, or badly, you describe and sample a specimen determines the accuracy of staging & diagnosis
- A true opportunity to be a diagnostic partner

- Massive variation across Europe
- Great variation across the UK
 - 2001 RCPATH & IBMS Dissection Pilot
 - 2009 – Principles of Good Practice for Biomedical Scientists Involved in Histopathological Dissection
 - 2009 – General Dissection Logbook
 - 2012 – First Advanced Dissection Logbooks (Lower GI & Breast)

- Historically in the UK
 - All dissection by medically qualified pathologists
 - Biomedical Scientists were more technicians than scientists
 - BMS would carry out the requests of the pathologists, with little autonomy

- Now in the UK
 - BMS trained by Pathologists in dissection
 - Complete training portfolio & pass exam
 - BMS train other BMS
 - BMS Perform routine specimen dissection of non-complex cases

- In Derby
 - Four full time specialist dissectors
 - All with Diploma of Expert Practice
 - Holding or working towards Advanced Specialist Diploma
 - Dissecting full range of specimens
 - Including multisystem malignant resections
 - Over 90% of cases handled by BMS

- The Diploma of Extended Practice
- Mandatory Module
 - Clinical governance
 - General principles of dissection
 - Surgical procedures
 - Pathological processes
 - Anatomical nomenclature

- Optional Modules
- One or more from:
 - Endocrine
 - Skin
 - Breast
 - Osteoarticular and soft tissue
 - Cardio-thoracic
 - Gastro-intestinal and hepatobiliary
 - Gynaecological
 - Genito-urinary
 - Haemopoietic
 - Neuromuscular
 - Head & neck

- Logbook
 - Sign off for each section by BMS & Pathologist supervisor
- Portfolio
 - Reflective log, documenting specimens and learning journey.
- Exam
 - Two papers
 - 1 – Mandatory Modules – 5 questions, answer all
 - 2 – Optional Modules – 11 questions, answer 6

- Diagnostic Partner vs Technician
 - **Category A** – simple transfer, *e.g.* Biopsy
 - **Category B** – representative sampling *e.g.* simple lipoma, unremarkable tonsils, prostatic chippings
 - **Category C** – more complex, targeted sampling, non-neoplastic
 - **Category D & E** – complex resections, including multi-organ malignant resections

- Diagnostic Partner vs Technician
 - Simple description vs targeted macro
 - Knowledge of the macroscopic appearance of pathology
 - Ability to correlate the clinical information with the specimen on the bench
 - Knowing the surgical techniques and how they relate to the specimen on the bench
 - Knowing the RCPATH datasets for each specimen type

- Diagnostic Partner vs Technician
- “Areas of congestion, fat wrapping and ulceration.”
- “Discontinuous areas of mucosal ulceration, transmural inflammation, with serosal congestion and fat wrapping. This is consistent with the clinical information indicating Crohn’s Disease.”

- Diagnostic Partner vs Technician
 - Kidney lesion measuring 70 mm.
 - Up to 70 mm = pT1b, over 70 mm = pT2
 - Tumour measure 35 mm & breaches renal capsule
 - Size indicates pT1a, but breach upgrades to pT3
 - Knowing what is important to the clinician, and therefore to the pathologist, enables you to focus on the important points.



**Tissue pathways for
gastrointestinal and pancreatobiliary pathology**

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The Royal College of Pathologists
Pathology: the science behind the cure

Standards and Datasets for Reporting Cancers

Dataset for colorectal cancer (2nd edition)

September 2007

Coordinators: Professor Geraint T Williams, Cardiff University
Professor Philip Quirke, Leeds University
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APPENDIX C PROFORMA FOR COLORECTAL CANCER RESECTIONS

Surname: Forenames: Date of birth:
Hospital: Hospital no: NHS no:
Date of receipt: Date of reporting: Report no:
Pathologist: Surgeon: Sex:

Specimen type: Total colectomy / Right hemicolectomy / Left hemicolectomy / Sigmoid colectomy / Anterior resection /
Abdominoperineal excision / Other (state)

Gross description

Site of tumour
Maximum tumour diameter: mm
Distance of tumour to nearer cut end mm
Tumour perforation (pT4) Yes No
If yes, perforation is serosal retro/intra peritoneal
For rectal tumours:
Relation of tumour to peritoneal reflection (tick one):
Above Astride Below
Plane of surgical excision (tick one):
Mesorectal fascia
Intramesorectal
Muscularis propria
For abdominoperineal resection specimens:
Distance of tumour from dentate line..... mm

Tumour involvement of margins

	N/A	Yes	No
Doughnuts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Margin (cut end)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-peritonealised <u>'circumferential'</u> margin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Histological measurement from <u>tumour</u> to non-peritonealised margin mm			

Metastatic spread

No of lymph nodes present
No of involved lymph nodes
(pN1 1-3 nodes, pN2 4+ nodes involved)
Highest node involved (Dukes C2) Yes No
Extramural venous invasion Yes No
Histologically confirmed distant metastases (pM1):
Yes No If yes, site:

- Diagnostic Partner vs Technician
 - Dissect specimen and pass to pathologist
 - Dissect specimen, review cases with pathologist, attend MDT, contribute to discussion of case, aid with surgical education on macroscopic appearance of pathology.
 - Use photographs for portfolio, training and teaching

- BMS Dissection has multiple benefits
 - Enhanced career for BMS
 - Release reporting time for pathologists
 - Reduced costs for department
 - Closer link between pathologists and BMS, both dissectors and other BMS
 - Closer links between BMS and wider care team, *e.g.* surgeons



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- Future developments
 - Additional D&E dissection portfolios
 - BMS Reporting pilot
 - Individualised error and quality reports (Barnes Report)

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